To: Burke, Thomas[Burke.Thomas@epa.gov]; Grevatt, Peter[Grevatt.Peter@epa.gov]; Beauvais, Joel[Beauvais.Joel@epa.gov]
From: Meiburg, Stan
Sent: Wed 4/27/2016 7:01:56 PM
Subject: Fwd: PFC Methods Update
NTTAArticle.pdf
ATT00001.htm

I don't know what to make of this.

Stan

Sent from my iPhone

Begin forwarded message:

From: "Zintek, Lawrence" <zintek.lawrence@epa.gov>
To: "Meiburg, Stan" <Meiburg.Stan@epa.gov>
Cc: "Burke, Thomas" <Burke.Thomas@epa.gov>, "Kaplan, Robert" <kaplan.robert@epa.gov>, "Beauvais, Joel" <Beauvais.Joel@epa.gov>, "Stanislaus, Mathy" <Stanislaus.Mathy@epa.gov>, "Breen, Barry" <Breen.Barry@epa.gov>, "Grevatt, Peter" <Grevatt.Peter@epa.gov>, "Shapiro, Mike" <Shapiro.Mike@epa.gov>
Subject: PFC Methods Update

Stan,

There seems to be a need for PFC methods now. Labs are using or referencing EPA method 537 or a modified version for every matrix. This leads to unknown in-house methods being used and the variability in data. EPA Method 537 is intended for drinking water. I heard an inquiry was made by a New England Senator recently. We can move on this now. We have methods (ASTM D7979-15 and D7968-14) for matrices other than drinking water, EPA just has to give the nod to use them. Labs will not use them if EPA does not give the go ahead, they will say they are using 537 to appease their customer when they are actually not. You will see what is going on below and how we are losing control, we need to regain control and lead. The methods are modern, easy, very qualitative (less false positives than 537 by using 2 SRM transitions and ion ratios), tested extensively in-house and used for ORD/NRMRL on various matrices (soil and water) and brings the analysis into the present, not 20-30 years back in time. We need to lead in methods.

A couple weeks ago at the DoD meeting in St. Louis most labs were talking about using

EPA Method 537 or a modified version of Method 537 no matter what the matrix. We are not doing drinking water here in Region 5 so we are not using Method 537. I was the only one at the DoD meeting not using EPA Method 537 or a modified 537. The modified versions are so modified in many cases they are no longer EPA method 537. They are referencing 537 for soils! That means they are actually using single-lab validated methods for the analysis of PFCs even though they are referencing 537. Janice Wiley from NAVSEA, 843-794-7346, at our meeting said the labs are using all different methods and the data is not consistent between labs. Pamela Hamlett from the Air Force, pamela.hamlett@us.af.mil, at lunch said that the data coming back from the labs is very poor, bad QC. The contract labs that were present acknowledged the two ASTM methods that were developed here and support their use. DoD presentation attached.

I could make this e-mail very long but I think you will get the point.

Excerpt from Eurofins e-mail,

"Of note, the Eurofins Lancaster laboratory is performing PFC analysis of DW, GW, soil, sediment and tissue matrices using a modified Method 537. We intend to participate in the pending EPA and Department of Defense method validation study for modified Method 537 for non DW matrices. Although the method modifications and the SOP are proprietary, our Eurofins Lancaster laboratory Technical Director, Charles Neslund has been in conversation with technical staff from EPA HQ, EPA Region V, NAVSEA LQAO, USACE, and AFCEC along with various state agency technical contacts regarding our method. We most recently met with these contacts at the Environmental Data Quality Conference two weeks ago in St Louis and the Emerging Contaminants Summit on Colorado last March. "

My comment- The contract labs are using the ASTM methods but they can't say they are or they won't get any business so they have to say they are using a modified EPA method 537 as shown above. These modified methods are not 537.

From one of our Regional Labs,

"Not close at all. Our method is more like D7979 than 537. No SPE used. After amending

the water sample with CH3CN and adding ISTDs and surrogates we direct inject. (The intro mentions 537 but that was put there for the benefit of the QAM who **really wanted** us to be using 537. [They both use LC-MS/MS…])"

We were set to multi-lab validate the 2 ASTM methods beginning Dec. 2015-Jan. 2016. We would have been close to being done by May-June 2016. It was decided by HQ not to validate the ASTM methods but to redo the methods and put them in SW-846 because people at OLEM did not want to reference ASTM methods. According to NTTA, attached article, EPA should be referencing consensus standards so not to have to re-invent the wheel and to save money. The two ASTM methods that were developed here were given to OW/OS&T and OLEM/SW-846 and they were not interested to publish so they were taken to ASTM. These are EPA methods, just at ASTM.

The list of volunteer (free) lab participants that I had lined up to help validate is below: (now it is summer, busy time, it will be hard to get them to volunteer again until late fall)

Ingrid Ericson <Ingrid.Ericson@oru.se>; Vining, Bryan (Wilmington) <Bryan.Vining@sgs.com>; SOliveira, Tiago (Wilmington) <Tiago.SOliveira@sgs.com>; Bennett, John Thomas <bennett67@llnl.gov>; Dodo, Gerald <Dodo.Gerald@epa.gov>; Jones-Lepp, Tammy <jones-lepp.tammy@epa.gov>; Philbrook, Peter <Philbrook.Peter@epa.gov>; Mathew, Johnson <mathew.johnson@epa.gov>; Quinn, Daniel J. <daniel.quinn@thermofisher.com>; Hauer, Michael J. <michael.hauer@thermofisher.com>; Zimmerman, John <Zimmerman.JohnH@epa.gov>; Schumacher, Brian <Schumacher.Brian@epa.gov>; Hanley, Adrian <Hanley.Adrian@epa.gov>; richard.burrows@testamericainc.com; Hauer, Michael J. <michael.hauer@thermofisher.com>; Kage, David <david.kage@thermofisher.com>; Marshall, Charles <charles.marshall1@thermofisher.com>; Thorn, Jonathan R <thornj@battelle.org>; Dindal, Amy <DindalA@battelle.org>; Pala, Franco <PalaF@battelle.org>; Morgan, Jade <Morgan.Jade@epa.gov>; Jerry Pizana <Jerry.Pizana@LCRA.ORG>; Dindal, Amy <DindalA@battelle.org>; Gundersen, Jennifer <Gundersen.Jennifer@epa.gov>; Mash, Heath <Mash.Heath@epa.gov>; Retarides, Christopher (DGS) <Christopher.Retarides@dgs.virginia.gov>; Snyder, Shane A - (snyders2) <snyders2@email.arizona.edu>; CharlesNeslund@eurofinsUS.com; Sivertsen, Scott <Sivertsen.Scott@epa.gov>; A. Daniel Jones <jonesar4@msu.edu>; fld3@psu.edu; nick_mcnamara@agilent.com; tarun.anumol@agilent.com; Gaines, Linda <Gaines.Linda@epa.gov>; Buechler, Karla <Karla.Buechler@testamericainc.com>

ThermoFisher sent a couple reps here a few weeks ago to learn how to do PFC analysis, they are getting requests from their customers.

Linda Gaines from OSRTI sent out an analyte list yesterday (attached), I can work on adding the few new analytes to the method and single-lab validate.

Carolyn Acheson from ORD/NRMRL suggestion to Linda Gaines below:

Hi Linda,

Larry's methods have been evaluated by ASTM and approved by them for multilab validation.

1. The analyte list focuses on the PFAAs such as PFOA and PFOS.
2. The methods were designed for matrices of environmental waters and soils, sludges, and sediments. These are relevant matrices for the sites you care about.
3. We worked with Larry on two studies in 2015 generating more than 600 samples. We are still reviewing the data and QA data, but the methods could handle the workload. The rate limiting step is data review and data package preparation.

I am attaching Larry's methods so you can see the analytes etc.

The ideal method for you may have a longer analyte list, but EPA needs methods soon. Larry told me he was at a DOD workshop and many labs described their method as "modified 537". They were even analyzing solids using a drinking water method. The modifications must have been substantial and probably varied considerably. I think your interest in having a method soon is appropriate.

I recommend multi-lab validating Larry's method now. In parallel, develop or adapt a method for precursors and transformation products to multi-lab validate later.

Just my thoughts,

Carolyn

My suggestions.

1) The 2 ASTM methods should be approved for use by EPA now. Each batch of samples contains all the QC- Cal. Curve, Method blanks, reporting limit checks, laboratory control spikes, matrix spikes, duplicates and end calibration checks. (Small comparison of 537 and the ASTM methods attached as Excel sheet.) This will allow up-to-date methods to be used for matrices other than drinking water. This will also allow for a level playing field of data being produced in order to compare results. Presently everything is referenced as a 537 method which they are not.

2) New analytes of interest to EPA can be added to the 2 ASTM Methods and utilized by labs to work the bugs out before validation.

3) The attorney's approved the CRADA to study the unknown PFCs, that will be going to Kaplan "soon" to sign. (Side project for this work)

4) Validate the new methods. (validate once this way instead validating the initial methods first and then validating the newer versions)

5) Work on new analytes of interest again if required.

There are more details I can bore you with but I will stop. I have to get back to work.

Any questions let me know,

Larry

Lawrence Zintek, Ph.D.

US EPA Region 5 Chicago Regional Laboratory

10th Floor

536 South Clark Street

Chicago, IL 60605

312-886-2925